

CLAIMS

What is claimed is:

1. An absorbent article, comprising:
- an absorbent chassis defining a longitudinal axis, a transverse axis, front and back waist edges parallel to the transverse axis, opposite side edges extending between the front and back waist edges, a front waist region contiguous with the front waist edge, a back waist region contiguous with the back waist edge, and a crotch region which extends between and interconnects the front and back waist regions, the front waist region defining a pair of transversely opposed front side panels and a front center panel positioned between and interconnecting the front side panels, the back waist region defining a pair of transversely opposed back side panels and a back center panel positioned between and interconnecting the back side panels, at least one pair of side panels being elastomeric in a direction generally parallel to the transverse axis, the absorbent chassis comprising a bodyside liner, an outer cover bonded to the bodyside liner, and an absorbent assembly disposed between the bodyside liner and the outer cover; and
- a fastening system for releasably securing the absorbent article in a pant-like configuration, the fastening system comprising first and second fastening components disposed on the back side panels and adapted to releasably engage first and second mating fastening components disposed on the front side panels;
- wherein the transverse distance between the first and second fastening components is substantially equal to the transverse distance between the first and second mating fastening components.
2. The absorbent article of claim 1, wherein each side panel has a waist end edge parallel to the transverse axis and forming part of one of the waist edges and an opposite leg end edge, and each side panel is elastomeric from the waist end edge to the leg end edge.
3. The absorbent article of claim 1, wherein each of the side panels comprises an elastomeric material and is elastomeric in a direction generally parallel to the transverse axis.

4. The absorbent article of claim 1, wherein the absorbent article comprises elastomeric components transversely disposed between the fastening components and the absorbent assembly.

5. The absorbent article of claim 1, further comprising leg elastic members longitudinally aligned along each side edge in the crotch region, the leg elastic members having front terminal points located adjacent longitudinally innermost parts of the front side panels and back terminal points located adjacent longitudinally innermost parts of the back side panels.

6. The absorbent article of claim 1, wherein the absorbent article has an overall length dimension and the side panels have an average length dimension that is about 20 percent or greater of the overall length dimension.

7. The absorbent article of claim 1, wherein the absorbent chassis defines an inner surface and an opposite outer surface, and the first and second fastening components comprise loop type fasteners disposed on the inner surface and the first and second mating fastening components comprise hook type fasteners disposed on the outer surface.

8. The absorbent article of claim 7, wherein the loop type fasteners are sized larger than the mating hook type fasteners.

9. The absorbent article of claim 1, wherein the pant configuration defines a waist opening and leg openings and engagement of the fastening components and mating fastening components defines refastenable seams that cover about 90 to about 98 percent of the distance between the waist opening and the leg openings.

10. The absorbent article of claim 1, wherein the first and second fastening components are disposed in the back waist region abutting the back waist edge and the first and second mating fastening components are disposed in the front waist region abutting the front waist edge.

11. The absorbent article of claim 1, wherein each first and second fastening component defines a length dimension that is aligned generally parallel to the longitudinal axis, a width dimension, and a length-to-width ratio of about 2 or greater.

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12. The absorbent article of claim 11, wherein each first and second mating fastening component defines a length dimension that is aligned generally parallel to the longitudinal axis, a width dimension, and a length-to-width ratio of about 2 or greater.

13. The absorbent article of claim 12, wherein each first and second fastening component and each first and second mating fastening component has a length-to-width ratio of about 5 or greater.

14. An absorbent article, comprising:

an absorbent chassis defining a longitudinal axis, a transverse axis, front and back waist edges parallel to the transverse axis, opposite side edges extending between the front and back waist edges, a front waist region contiguous with the front waist edge, a back waist region contiguous with the back waist edge, and a crotch region which extends between and interconnects the front and back waist regions, the absorbent chassis comprising:

a rectangular composite structure having opposite linear side edges parallel to the longitudinal axis and opposite linear end edges parallel to the transverse axis, the composite structure comprising a bodyside liner, an outer cover bonded to the bodyside liner, and an absorbent assembly disposed between the bodyside liner and the outer cover;

first and second front side panels bonded to the composite structure in the front waist region;

first and second back side panels bonded to the composite structure in the back waist region;

a fastening system for releasably securing the absorbent article in a pant-like configuration, the fastening system comprising first and second fastening components connected to the respective first and second back side panels and adapted to releasably engage first and second mating fastening components connected to the respective first and second front side panels; and

elastomeric components transversely disposed between the fastening components and the absorbent assembly;

wherein the transverse distance between the first and second fastening components is substantially equal to the transverse distance between the first and second mating fastening components.

15. The absorbent article of claim 14, wherein the first and second fastening components are disposed in the back waist region abutting the back waist edge and the first and second mating fastening components are disposed in the front waist region abutting the front waist edge.

16. The absorbent article of claim 14, wherein each side panel has a waist end edge parallel to the transverse axis and forming part of one of the waist edges and an opposite leg end edge, and each side panel is elastomeric from the waist end edge to the leg end edge.

17. The absorbent article of claim 14, wherein the front side panels are longitudinally spaced from the back side panels.

18. The absorbent article of claim 14, wherein the absorbent article has an overall length dimension and the side panels have an average length dimension that is about 20 percent or greater of the overall length dimension.

19. The absorbent article of claim 14, wherein the absorbent chassis defines an inner surface and an opposite outer surface, and the first and second fastening components comprise loop type fasteners disposed on the inner surface and the first and second mating fastening components comprise hook type fasteners disposed on the outer surface, the loop type fasteners being sized larger than the mating hook type fasteners.

20. The absorbent article of claim 14, wherein the pant configuration defines a waist opening and leg openings and engagement of the fastening components and mating fastening components defines refastenable seams, the refastenable seams covering about 90 to about 98 percent of the distance between the waist opening and the leg openings.

21. An absorbent article, comprising:

an absorbent chassis defining a longitudinal axis, a transverse axis, first and second waist edges parallel to the transverse axis, opposite side edges extending between the first and second waist edges, a first waist region contiguous with the first waist edge, a second waist region contiguous with the second waist edge, and a crotch region which extends between and interconnects the first and second waist regions, the absorbent chassis comprising:

a rectangular composite structure having opposite linear side edges parallel to the longitudinal axis and opposite linear end edges parallel to the transverse axis, the composite structure comprising a bodyside liner, an outer cover bonded to the bodyside liner, and an absorbent assembly disposed between the bodyside liner and the outer cover;

first and second elastomeric side panels bonded to the composite structure in the first waist region;

first and second elastomeric side panels bonded to the composite structure in the second waist region;

support members bonded to and extending transversely outward from the first and second elastomeric side panels in the second waist region; and

a fastening system for releasably securing the absorbent article in a pant-like configuration, the fastening system comprising first and second fastening components disposed on the support members and adapted to releasably engage first and second mating fastening components disposed on the respective first and second elastomeric side panels in the first waist region;

wherein the elastomeric side panels in the first waist region are longitudinally spaced from the elastomeric side panels in the second waist region, and the width of the elastomeric side panels in the first waist region is the same as the width of the elastomeric side panels in the second waist region.

22. The absorbent article of claim 21, further comprising support members bonded to and extending transversely outward from the first and second elastomeric side panels in the first waist region, wherein the first and second mating fastening components are disposed on the support members in the first waist region.

23. The absorbent article of claim 21, wherein the first and second fastening components comprise integral portions of the support members.

24. The absorbent article of claim 23, wherein the support members comprise a loop material.

25. A disposable absorbent article, comprising an absorbent chassis and a fastening system for releasably attaching a front waist region of the absorbent chassis to a back waist region of the absorbent chassis to define a refastenable pant having a waist opening and a pair of leg openings, the refastenable pant comprising:

5 a pair of elastomeric, nonwoven front side panels extending from the waist opening to each leg opening;

a pair of elastomeric, nonwoven back side panels extending from the waist opening to each leg opening;

10 a pair of refastenable seams extending from the waist opening to each leg opening, each refastenable seam disposed between an elastomeric front side panel and an elastomeric back side panel; and

a pair of elastomeric leg members which partially encircle each leg opening.

26. The disposable absorbent article of claim 25, wherein the refastenable pant further comprises:

an elastomeric front waistband disposed in the front waist region and positioned between the pair of elastomeric front side panels; and

5 an elastomeric back waistband disposed in the back waist region and positioned between the pair of elastomeric back side panels

27. The disposable absorbent article of claim 25, wherein each elastomeric leg member extends from adjacent an elastomeric front side panel in the front waist region to adjacent an elastomeric side panel in the back waist region.

28. The disposable absorbent article of claim 25, wherein the absorbent article has an overall length dimension, the front side panels are longitudinally spaced from the back side panels, and the front and back side panels have an average length dimension that is about 20 percent or greater of the overall length dimension.

29. A training pant for use in training a child to use the toilet, comprising:

an absorbent chassis defining a longitudinal axis, a transverse axis, an overall length dimension parallel to the longitudinal axis, front and back waist edges parallel to the transverse axis, opposite side edges extending between the front and back waist edges, a front waist region contiguous with the front waist edge, a back waist region contiguous with the back waist edge, and a crotch region which extends between and interconnects the front and back waist regions, the absorbent chassis comprising:

a rectangular composite structure having opposite linear side edges parallel to the longitudinal axis and opposite linear end edges parallel to the transverse axis, the composite structure comprising:

- (a) a liquid permeable bodyside liner;
- (b) a liquid impermeable outer cover bonded to the bodyside liner, the outer cover comprising a liquid impermeable inner layer and a nonwoven outer layer;
- (c) an outer cover graphic disposed on the outer cover;
- (d) an absorbent assembly comprising hydrophilic fibers disposed between the bodyside liner and the outer cover; and
- (e) leg elastic members longitudinally aligned along the side edges of the composite structure;

first and second front side panels bonded to the composite structure in the front waist region, each front side panel having a distal edge, an interior portion between the distal edge and the composite structure, a waist end edge parallel to the transverse axis and forming part of the front waist edge, and a leg end edge forming part of the side edge, the front side panels having an average length dimension that is about 20 percent or greater of the overall length dimension of the absorbent article;

first and second back side panels bonded to the composite structure in the back waist region and longitudinally spaced from the first and second front side panels, each back side panel having a distal edge, an interior portion between the distal edge and the composite structure, a waist end edge parallel to the transverse axis and forming part of the back waist edge, and a leg end edge forming part of the side edge, the back side panels having an average length dimension that is about 20 percent or greater of the overall length dimension of the absorbent article; and



35                    an elastomeric material disposed between nonwoven facing layers in at least the interior portions to render the side panels elastomeric in a direction generally parallel to the transverse axis; and

40                    a fastening system for releasably securing the absorbent article in a pant-like configuration having a waist opening and a pair of leg openings, the fastening system comprising first and second fastening components adapted to releasably engage first and second mating fastening components, the first and second fastening components being connected to the respective first and second back side panels adjacent the distal edges, the first and second mating fastening components being connected to the respective first and second front side panels adjacent the distal edges, the fastening components and the

45                    mating fastening components each comprising mechanical fasteners having a length-to-width ratio of about 5 or greater, and engagement of the fastening components and mating fastening components defines refastenable seams that cover about 80 to 100 percent of the distance between the waist opening and the leg openings.